

Trenco 818 Soundside Rd Edenton, NC 27932

Re: J0521-2776

Weaver/Lot 5B Williams Farm/Harnett

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: E15795784 thru E15795814

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844



June 2,2021

Gilbert, Eric

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795784 J0521-2776 COMMON SUPPORTED GAB A1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:35 2021 Page 1 Comtech, Inc.

ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-KT5uw95L4Q\_wa05T2LkQkqhZ\_b0mzSKRQgPeAuzAKaQ 33-0-0 33-10-8 0-10-8 16-6-0

Scale = 1:58.6

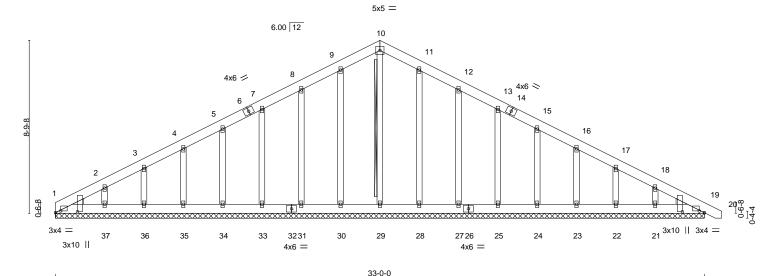


Plate Off	sets (X,Y)	[1:0-3-2,0-1-1], [1:0-0-10,1-1-7	], [19:0-3-2,0-1-1], [	19:0-0-10,1-1-	/]						
LOADIN	G (psf)	SPACING- 2-0	-0 <b>CSI</b>		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.1	5 TC	0.04	Vert(LL)	0.00	19	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL 1.1	5 BC	0.02	Vert(CT)	0.00	19	n/r	120		
BCLL	0.0 *	Rep Stress Incr YE	S WB	0.11	Horz(CT)	0.01	19	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	1 Mat	rix-S	, ,					Weight: 261 lb	FT = 20%

33-0-0

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No.1

**OTHERS** WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

2x4 SP No.2

**BRACING-**

TOP CHORD **BOT CHORD** WFBS

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace: 2x4 SPF No.2 - 10-29

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 33-0-0.

(lb) - Max Horz 1=-180(LC 17)

Max Uplift All uplift 100 lb or less at joint(s) 1, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22, 21 All reactions 250 lb or less at joint(s) 1, 29, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22, Max Grav 21 19

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

16-6-0

16-6-0

TOP CHORD 9-10=-114/289, 10-11=-114/289

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22, 21.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

Design Valid to its 80 mly with win New Commercials. This design is based only upon parameters shown, and is for an individual orusining Component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



E15795785 J0521-2776 COMMON 5 A2 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:38 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-k2m1YA8DNLMVRUq2kUI7MTJ\_kowBAn1t6eeInDzAKaN 8-8-2 16-6-0 24-3-14 33-0-0 33-10-8 0-10-8 8-8-2 7-9-14 8-8-2

Qty

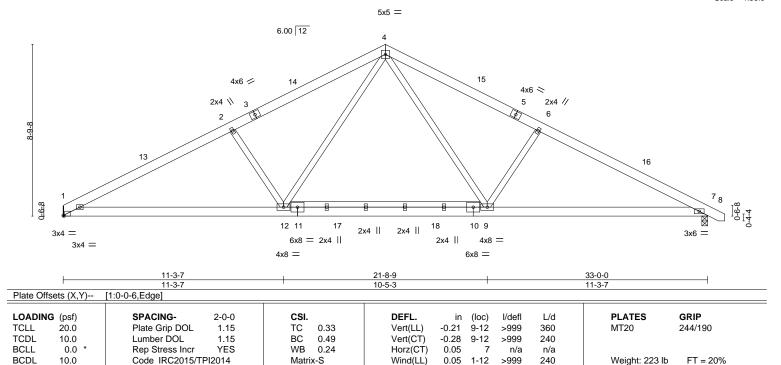
Ply

Weaver/Lot 5B Williams Farm/Harnett

Structural wood sheathing directly applied or 4-8-4 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

Scale = 1:59.0



BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

Job

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WFBS

REACTIONS. (size) 1=Mechanical, 7=0-3-8 Max Horz 1=-113(LC 8)

Truss

Truss Type

Max Uplift 1=-79(LC 12), 7=-91(LC 13) Max Grav 1=1311(LC 1), 7=1364(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-2297/531 2-4=-2064/545 4-6=-2055/529 6-7=-2283/512

**BOT CHORD** 1-12=-347/2015. 9-12=-110/1324. 7-9=-344/1965

WFBS 4-9=-142/850, 6-9=-495/297, 4-12=-145/865, 2-12=-509/305

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 33-8-10 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



June 2,2021

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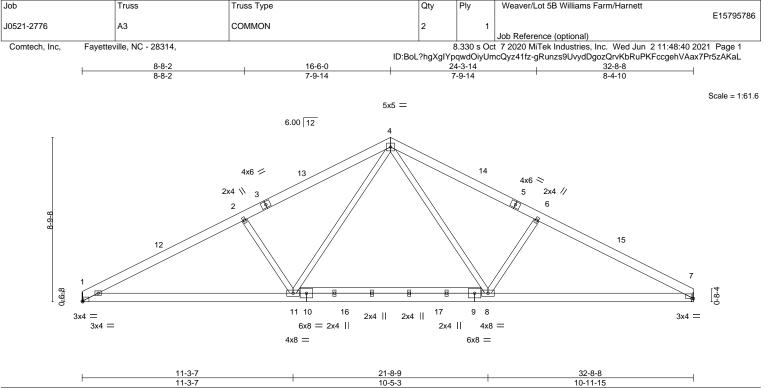


Plate Off	Plate Offsets (X,Y) [1:0-0-6,Edge], [7:0-1-0,0-0-1]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (l	loc) I/c	efl L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	-0.20 8	3-11 >9	99 360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.28 8	3-11 >9	99 240			
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.05	7	n/a n/a			

Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.05 1-11 >999

240

Structural wood sheathing directly applied or 4-8-9 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 220 lb

FT = 20%

LUMBER-

**BCDL** 

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No.1 WFBS 2x4 SP No.2

10.0

REACTIONS. 1=Mechanical, 7=Mechanical (size)

Max Horz 1=-108(LC 8)

Max Uplift 1=-79(LC 12), 7=-78(LC 13) Max Grav 1=1303(LC 1), 7=1303(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

Code IRC2015/TPI2014

TOP CHORD 1-2=-2280/528, 2-4=-2048/543, 4-6=-2021/538, 6-7=-2242/521

**BOT CHORD** 1-11=-354/1997. 8-11=-116/1306. 7-8=-347/1920

WFBS 4-8=-139/822, 6-8=-473/295, 4-11=-145/866, 2-11=-509/305

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 32-7-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



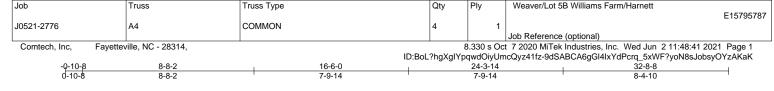
June 2,2021

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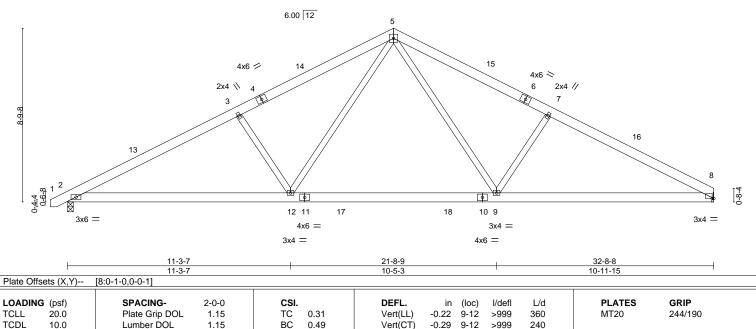
ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





5x5 =





Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

**BOT CHORD** 

0.05

0.05

8

2-12

n/a

>999

n/a

240

Rigid ceiling directly applied or 10-0-0 oc bracing.

Structural wood sheathing directly applied or 4-9-10 oc purlins.

Weight: 207 lb

FT = 20%

LUMBER-

**BCLL** 

BCDL

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WFBS

0.0

10.0

REACTIONS. (size) 2=0-3-8, 8=Mechanical

Max Horz 2=113(LC 9)

Max Uplift 2=-91(LC 12), 8=-78(LC 13) Max Grav 2=1352(LC 1), 8=1299(LC 1)

Rep Stress Incr

Code IRC2015/TPI2014

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-2261/507 3-5=-2051/524 5-7=-2034/536 7-8=-2238/519

**BOT CHORD** 2-12=-347/1992, 9-12=-113/1312, 8-9=-341/1925

WFBS 5-9=-137/833, 7-9=-473/294, 5-12=-141/861, 3-12=-495/297

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 32-7-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-S

0.23

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

YES

- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Qty E15795788 J0521-2776 **GABLE** A5 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:43 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-50awbuCMCt?oXFi?W1uI3W0slpdGr\_ycGvL3SQzAKaI -0-10-8 0-10-8 16-6-0 24-3-14 32-8-8

7-9-14

Ply

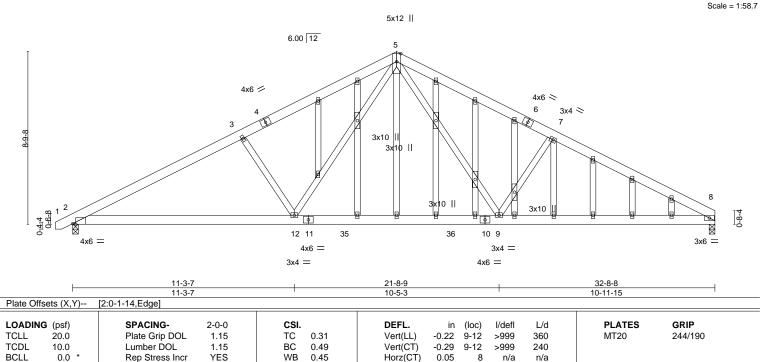
7-9-14

Weaver/Lot 5B Williams Farm/Harnett

8-4-10

Weight: 274 lb

FT = 20%



Wind(LL)

**BRACING-**

TOP CHORD

**BOT CHORD** 

0.07

2-12

>999

240

Rigid ceiling directly applied or 9-11-5 oc bracing.

Structural wood sheathing directly applied or 4-9-13 oc purlins.

LUMBER-

BCDL

Job

TOP CHORD 2x6 SP No 1 **BOT CHORD** 2x6 SP No.1 2x4 SP No.2 WFBS

10.0

**OTHERS** 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 8=0-3-8

Max Horz 2=180(LC 16)

Truss

8-8-2

Truss Type

Max Uplift 2=-293(LC 12), 8=-265(LC 13) Max Grav 2=1349(LC 1), 8=1296(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

Code IRC2015/TPI2014

TOP CHORD  $2-3=-2254/830,\ 3-5=-2044/833,\ 5-7=-2019/825,\ 7-8=-2221/818$ 

BOT CHORD 2-12=-615/1947, 9-12=-244/1297, 8-9=-602/1906

**WEBS** 5-9=-259/807, 7-9=-463/412, 5-12=-272/845, 3-12=-495/423

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=293, 8=265.





Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5B Williams Farm/Harnett
					E15795789
J0521-2776	B1	COMMON SUPPORTED GAB	1	1	
					Joh Reference (ontional)

5x5 =

<u>5-7-0</u>

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:45 2021 Page 1 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-1Phg0ZDckVFVnZsOeSwm8x6GhdQ3J?YvjDqAXJzAKaG 11-2-0

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

Scale = 1:40.1

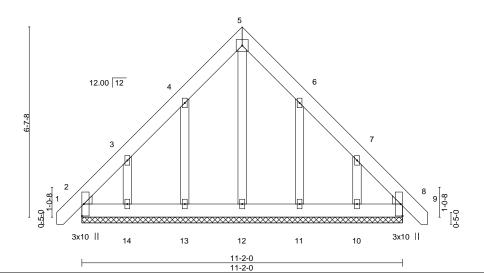


Plate Offsets (X,Y)-- [2:0-0-6,0-0-6], [2:0-0-12,0-3-1], [8:0-0-6,0-0-6], [8:0-0-12,0-3-1]

0-10-8

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	n (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL) -0.0	8 C	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.0	8 0	n/r	120		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.0	8 0	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 95 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 **OTHERS** 

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. All bearings 11-2-0.

Max Horz 2=-190(LC 10) (lb) -

Max Uplift All uplift 100 b or less at joint(s) 2, 8 except 13=-130(LC 12), 14=-189(LC 12), 11=-127(LC 13),

10=-185(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-2 to 3-6-13, Exterior(2) 3-6-13 to 5-7-0, Corner(3) 5-7-0 to 9-11-13, Exterior(2) 9-11-13 to 11-11-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8 except (|t=|b|) 13=130, 14=189, 11=127, 10=185.
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



June 2,2021



Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795790 J0521-2776 B2 COMMON GIRDER 2 Job Reference (optional)

5x5 ||

Fayetteville, NC - 28314, Comtech, Inc.

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:47 2021 Page 1 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-znpRRFFtF6VD0s0nltyEDMBWMQzTnnuCBXJHbBzAKaE

Scale = 1:41.3

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

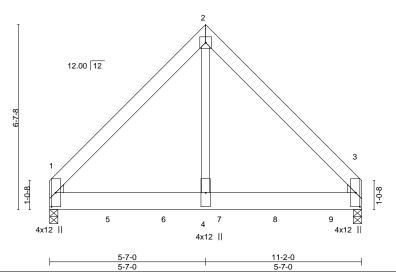


Plate Offsets (X,Y)-- [1:0-1-4,0-1-4], [1:0-2-8,0-4-13], [1:0-6-0,0-1-12], [3:0-1-4,0-1-4], [3:0-2-8,0-4-13], [3:0-6-0,0-1-12]

LOADING TCLL	<b>G</b> (psf) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15		CSI.	DEFL. Vert(LL)	in -0.03	(loc) 3-4	l/defl >999	L/d 360	PLATES MT20	<b>GRIP</b> 244/190
TCDL	10.0	Lumber DOL 1.15		BC 0.60	Vert(CT)	-0.06	3-4	>999	240	20	2,
BCLL	0.0 *	Rep Stress Incr NC	)   \	VB 0.52	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	l l	//atrix-S	Wind(LL)	0.02	3-4	>999	240	Weight: 165 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x8 SP No.1 2x4 SP No 2 WFBS

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 1=0-3-8, 3=0-3-8

Max Horz 1=-144(LC 23) Max Uplift 1=-301(LC 9), 3=-265(LC 8)

Max Grav 1=4586(LC 1), 3=3979(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-3212/267, 2-3=-3207/266 **BOT CHORD** 1-4=-137/2118, 3-4=-137/2118

WEBS 2-4=-239/4237

### NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=301, 3=265.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1293 lb down and 88 lb up at 0-1-12, 1283 lb down and 98 lb up at 2-2-0, 1279 lb down and 98 lb up at 4-2-0, 1279 lb down and 98 lb up at 6-2-0, and 1279 lb down and 98 lb up at 8-2-0, and 1281 lb down and 96 lb up at 10-2-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

June 2,2021



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chorembers only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses sand truss systems, see

\*\*ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Γ.	Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5B Williams Farm/Harnett
						E15795790
	J0521-2776	B2	COMMON GIRDER	1	2	Job Reference (optional)

Comtech, Inc,

Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:47 2021 Page 2 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-znpRRFFtF6VD0s0nltyEDMBWMQzTnnuCBXJHbBzAKaE

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-60, 1-3=-20

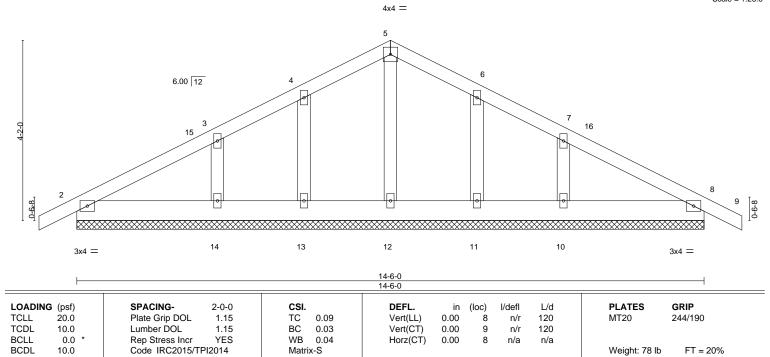
Concentrated Loads (lb)

Vert: 1=-1293(F) 5=-1283(F) 6=-1279(F) 7=-1279(F) 8=-1279(F) 9=-1281(F)

Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795791 J0521-2776 C1 COMMON SUPPORTED GAB Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:49 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-wAxBsxG7njlxFA99tl?jJnGxfEnpFpsVeroNg4zAKaC 15-4-8

Scale = 1:26.6

0-10-8



LUMBER-

**OTHERS** 

-0-10-8

0-10-8

TOP CHORD 2x4 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 **BRACING-**

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

14-6-0

7-3-0

REACTIONS. All bearings 14-6-0.

Max Horz 2=-82(LC 13) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 11 except 14=-112(LC 12), 10=-112(LC 13) Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 11 except 14=250(LC 1), 10=250(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-3-0, Exterior(2) 3-3-0 to 7-3-0, Corner(3) 7-3-0 to 11-7-13, Exterior(2) 11-7-13 to 15-4-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7-3-0 7-3-0

- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 11 except (jt=lb) 14=112, 10=112.



Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795792 J0521-2776 C2 COMMON 3 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:49 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-wAxBsxG7njlxFA99tI?jJnGsDEkaFoDVeroNg4zAKaC -0-10-8 7-3-0 7-3-0 14-6-0 0-10-8 0-10-8 Scale = 1:26.9 4x6 =3 6.00 12 6 2x4 || 3x6 / 3x6 < 14-6-0 7-3-0 7-3-0 Plate Offsets (X,Y)--[2:0-0-12,0-1-8], [4:0-0-12,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.44 Vert(LL) -0.02 2-6 >999 360 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.15 BC 0.24 -0.05 2-6 >999 240 WB 0.08

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

**BOT CHORD** 

0.01

0.02

2-6

n/a

>999

n/a

240

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 66 lb

FT = 20%

LUMBER-

**BCLL** 

BCDL

TOP CHORD 2x4 SP No 1 BOT CHORD 2x6 SP No.1 WFBS 2x4 SP No.2

0.0

10.0

REACTIONS.

(size) 2=0-3-8, 4=0-3-8 Max Horz 2=-53(LC 10)

Max Uplift 2=-48(LC 12), 4=-48(LC 13) Max Grav 2=630(LC 1), 4=630(LC 1)

Rep Stress Incr

Code IRC2015/TPI2014

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-803/237, 3-4=-803/237 **BOT CHORD** 2-6=-75/617, 4-6=-75/617

WFBS 3-6=0/366

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 7-3-0, Exterior(2) 7-3-0 to 11-7-13, Interior(1) 11-7-13 to 15-4-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

YES

- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.





Job Truss Truss Type Qty Plv Weaver/Lot 5B Williams Farm/Harnett E15795793 J0521-2776 СЗ COMMON GIRDER 2 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:51 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-sY3xHdINJL?fVUJY\_j1BOCMD01KFjYno59HUkzzAKaA 14-6-0 Scale = 1:25.7 5x5 || 6.00 12 7 4 4x12 || 4x12 ≥ 7-3-0 7-3-0 7-3-0 Plate Offsets (X,Y)--[4:0-6-4,0-2-0] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.36 Vert(LL) -0.08 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.61 Vert(CT) -0.16 3-4 >999 240 WB **BCLL** 0.0 Rep Stress Incr NO 0.72 Horz(CT) 0.02 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 3-4 >999 240 Weight: 173 lb FT = 20% 0.06 **BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x8 SP 2400F 2.0E 2x4 SP No.2 WFBS

REACTIONS. (size) 1=0-3-8, 3=0-3-8

Max Horz 1=-47(LC 25)

Max Uplift 1=-324(LC 8), 3=-382(LC 9) Max Grav 1=4670(LC 1), 3=5490(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-7127/503 2-3=-7121/502

**BOT CHORD** 1-4=-396/6308, 3-4=-396/6308

WFBS 2-4=-316/5855

### NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=324, 3=382,
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1291 lb down and 99 lb up at 2-0-12, 1291 lb down and 99 lb up at 4-0-12, 1291 lb down and 99 lb up at 6-0-12, 1291 lb down and 99 lb up at 8-0-12, 1291 lb down and 99 lb up at 10-0-12, and 1283 lb down and 99 lb up at 11-6-0, and 1285 lb down and 98 lb up at 13-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-60, 1-3=-20

Structural wood sheathing directly applied or 5-10-10 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

June 2,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5B Williams Farm/Harnett
10504 0770	00	OOMMON OIRRED			E15795793
J0521-2776	C3	COMMON GIRDER	1	2	Job Reference (optional)

Comtech, Inc,

Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:51 2021 Page 2 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-sY3xHdlNJL?fVUJY\_j1BOCMD01KFjYno59HUkzzAKaA

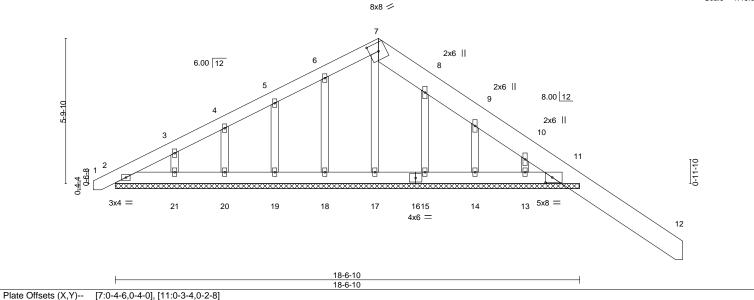
LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 5=-1291(B) 6=-1291(B) 7=-1291(B) 8=-1291(B) 9=-1291(B) 10=-1283(B) 11=-1285(B)

Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795794 J0521-2776 D1 **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:52 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-KldKUzJ?4e7W6eukYQYQwQuQaRodS8vxKp12HPzAKa9 10-6-3 14-9-5 18-6-10

Scale = 1:46.0



LUMBER-

LOADING (psf)

20.0

10.0

0.0

10.0

**TCLL** 

TCDL

**BCLL** 

BCDL

TOP CHORD 2x6 SP No.1 \*Except\* 7-12: 2x10 SP No.1

BOT CHORD 2x6 SP No.1 **OTHERS** 2x4 SP No.2 BRACING-

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

**PLATES** 

Weight: 160 lb

MT20

GRIP

244/190

FT = 20%

6-0-0 oc bracing: 11-13.

I/defI

n/r

n/r

n/a

L/d

120

120

n/a

(loc)

12

12

11

-0.03

-0.06

0.00

3-9-5

4-1-6

REACTIONS. All bearings 18-6-10.

(lb) -Max Horz 2=-215(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 19, 20, 21, 15 except 11=-489(LC 13), 14=-121(LC 13),

CSI.

0.24

0.09

0.09

TC

BC

WB

Matrix-S

13=-420(LC 1)

Max Grav All reactions 250 lb or less at joint(s) 2, 17, 18, 19, 20, 21, 15, 14 except 11=877(LC 1),

10-6-3

13=311(LC 13)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

1.15

1.15

YES

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 10-11=-323/382 WEBS 10-13=-511/351

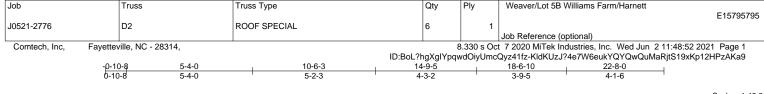
### NOTES-

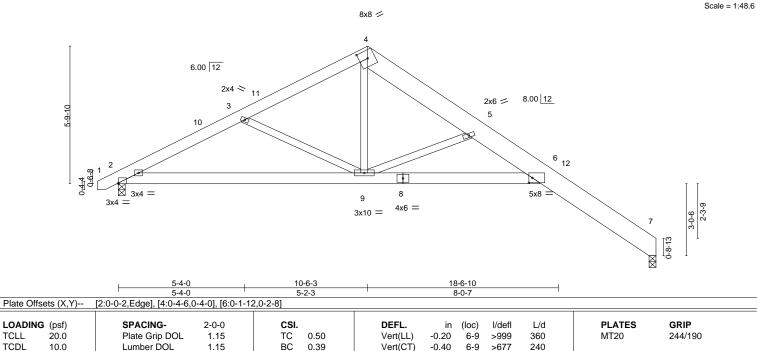
1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 19, 20, 21, 15 except (jt=lb) 11=489, 14=121, 13=420.









Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

**BOT CHORD** 

0.26

0.13

n/a

6 >999 n/a

240

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 153 lb

FT = 20%

LUMBER-TOP CHORD

**BCLL** 

BCDL

2x6 SP No.1 \*Except\*

4-7: 2x10 SP 2400F 2.0E

**BOT CHORD** 2x6 SP No.1 **WEBS** 2x4 SP No.2

0.0

10.0

REACTIONS.

(size) 7=0-3-8, 2=0-3-8 Max Horz 2=176(LC 11)

Max Uplift 7=-57(LC 13), 2=-58(LC 12) Max Grav 7=909(LC 1), 2=949(LC 1)

Rep Stress Incr

Code IRC2015/TPI2014

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD  $2\text{-}3\text{=-}1528/386,\ 3\text{-}4\text{=-}1206/274,\ 4\text{-}5\text{=-}1286/301,\ 5\text{-}6\text{=-}2001/430,\ 6\text{-}7\text{=-}452/169}$ 

YES

**BOT CHORD** 2-9=-189/1315. 6-9=-273/2152

**WEBS** 3-9=-349/230, 4-9=-109/874, 5-9=-1256/333

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 10-6-3, Exterior(2) 10-6-3 to 15-1-11, Interior(1) 15-1-11 to 22-6-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-S

0.52

- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.



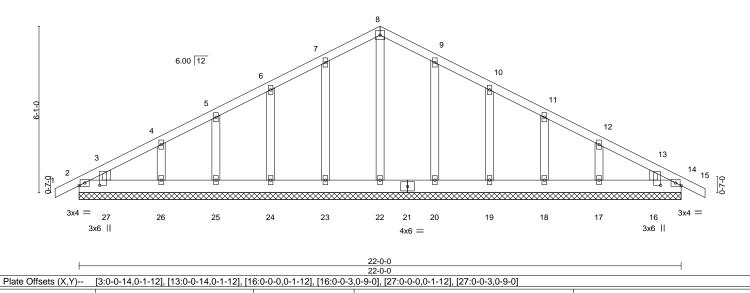


Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795796 J0521-2776 G1 COMMON SUPPORTED GAB Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:54 2021 Page 1 Comtech, Inc. ID:41DHdZG\_ibjTUL8rQmgmdpz4zzJ-G7k4veKGcFNEMx27grau0r\_oFFVCw3oEo7W8LHzAKa7

4x4 =

Scale = 1:42.1

22-10-8 0-10-8



LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) -0.00 14 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.02 Vert(CT) -0.00 15 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.06 Horz(CT) 0.00 14 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 134 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SP No 1 BOT CHORD 2x6 SP No 1

<del>10-10-8</del> 0-10-8

2x4 SP No 2 **OTHERS** 

BRACING-

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

22-0-0

11-0-0

REACTIONS. All bearings 22-0-0.

(lb) -Max Horz 2=-120(LC 17)

Max Uplift All uplift 100 lb or less at joint(s) 2, 23, 24, 25, 26, 27, 20, 19, 18, 17, 16, 14 Max Grav All reactions 250 lb or less at joint(s) 2, 22, 23, 24, 25, 26, 27, 20, 19, 18, 17, 16, 14

11-0-0 11-0-0

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

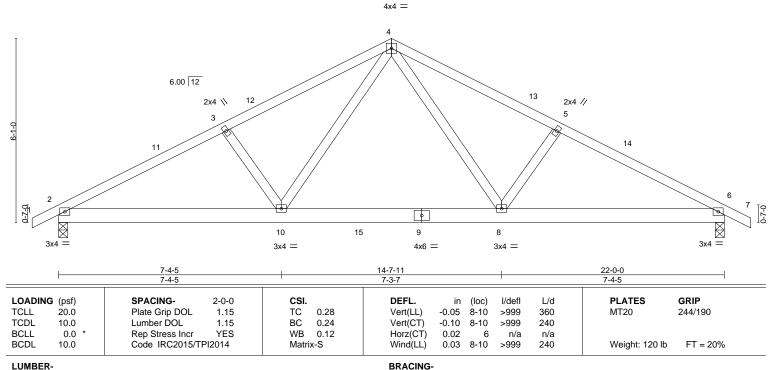
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 23, 24, 25, 26, 27, 20, 19, 18, 17, 16, 14.





Job	Truss	Tr	russ Type	C	lty	Ply	Weaver/Lot 5	B Williams Farm/Harnett	
									E15795797
J0521-2776	G2	Co	ommon	6		1			
							Job Reference	(optional)	
Comtech, Inc,	Fayetteville, NC - 28	3314,			8	.330 s Oc	t 7 2020 MiTek	Industries, Inc. Wed Jun 2 11:48:5	55 2021 Page 1
	•			ID:41DH	dZG_ibj1	UL8rQmg	mdpz4zzJ-kKIS	37_LuNZW5z5dJDY57Y2WvDfn?fV	8N0nFitkzAKa6
<sub>Ր</sub> 0-10-8 <sub>լ</sub>	5-6-7	1	11-0-0	1		16-5-9	1	22-0-0	22-10-8
0-10-8	5-6-7		5-5-9			5-5-9		5-6-7	0-10-8

Scale = 1:38.1



TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x6 SP No.1 2x4 SP No.2 WFBS

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=-77(LC 10)

Max Uplift 2=-66(LC 12), 6=-66(LC 13) Max Grav 2=930(LC 1), 6=930(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-1464/353, 3-4=-1284/366, 4-5=-1284/366, 5-6=-1464/353

TOP CHORD **BOT CHORD** 2-10=-228/1223 8-10=-70/829 6-8=-236/1223

**WEBS** 4-8=-98/488, 5-8=-284/207, 4-10=-98/489, 3-10=-284/207

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.



Structural wood sheathing directly applied or 5-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795798 J0521-2776 M1 **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:56 2021 Page 1 Comtech, Inc.

ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-CWsqKKMW8texbFCVnGdM5G36o2AFOzeXFR?FQAzAKa5 -0-10-8 0-10-8 4-6-8 8-4-0 4-6-8

2x4 || 5 2x4 || 3.00 12 2x4 || 10 3x4 =0-4-0 8 6 2x4 || 2x4 || 2x4 ||

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL)	-0.00 1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.05	Vert(CT)	0.00 1	n/r	120		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT)	0.00	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 40 lb	FT = 20%

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, 2x6 SP No.1 **BOT CHORD** except end verticals. 2x6 SP No.1 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WFBS

REACTIONS. All bearings 8-2-8.

(lb) -Max Horz 2=109(LC 8)

2x4 SP No.2

Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7 except 8=-107(LC 12) Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7 except 8=344(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**WEBS** 3-8=-255/218

### NOTES-

OTHERS

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 8-1-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 7 except (jt=lb) 8=107.



Scale = 1:17.0

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795799 J0521-2776 M2 MONOPITCH 5 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:57 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-hiQDXgM8vAmoDPmiLz8bdTc5HSS87QUgU5kpyczAKa4 -0-10-8 4-6-8 8-4-0

4-6-8

Scale = 1:17.5

3-9-8

>999

>880

except end verticals.

n/a

240

n/a

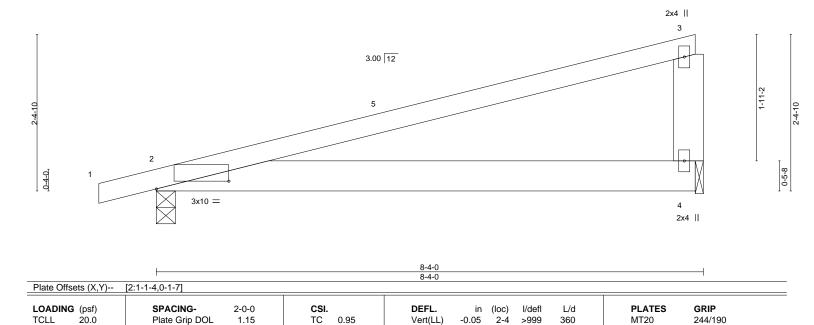
240

Rigid ceiling directly applied or 10-0-0 oc bracing.

Structural wood sheathing directly applied or 2-2-0 oc purlins,

Weight: 37 lb

FT = 20%



Vert(CT)

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

BOT CHORD

-0.11

0.00

0.00

2-4

2

LUMBER-

TCDL

**BCLL** 

BCDL

TOP CHORD 2x4 SP No.1 BOT CHORD 2x6 SP No.1

20.0

10.0

0.0

10.0

0-10-8

WFBS 2x6 SP No.1

REACTIONS. (size) 2=0-3-8, 4=0-1-8 Max Horz 2=77(LC 8)

Max Uplift 2=-66(LC 8), 4=-41(LC 12) Max Grav 2=384(LC 1), 4=314(LC 1)

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 8-1-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

BC

WB

Matrix-P

0.26

0.00

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.15

YES

- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.





Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5B Williams Farm/Harnett	
					E15795800	
J0521-2776	M3	ROOF SPECIAL	6	1		
					Job Reference (optional)	
Comtech Inc Favettey	ille NC - 28314			3 330 s Oct	t 7 2020 MiTek Industries Inc. Wed Jun 2 11:48:58 2021 Page 1	

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Scale = 1:17.1

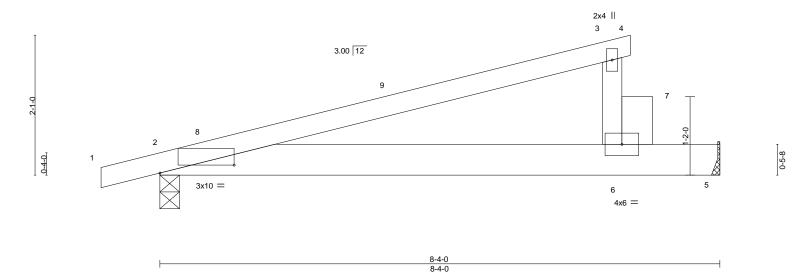


Plate Offsets (A, f)				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.71	Vert(LL) -0.11 2-6 >884 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.86	Vert(CT) -0.26 2-6 >373 240	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.00 5 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P	Wind(LL) 0.17 2-6 >569 240	Weight: 35 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

2x4 SP No 1 2x6 SP No.1

BOT CHORD 2x4 SP No.2 \*Except\* **WEBS** 

6-7: 2x6 SP No.1

REACTIONS. (size) 2=0-3-8, 5=Mechanical Max Horz 2=68(LC 8)

Max Uplift 2=-75(LC 8), 5=-58(LC 12) Max Grav 2=468(LC 1), 5=656(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 7-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 500 lb down and 265 lb up at 7-1-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-3=-60, 3-4=-20, 2-5=-20

Concentrated Loads (lb) Vert: 6=-500



Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 7-8-6 oc bracing.

except end verticals.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5B Williams Farm/Harnett	
					E15795801	
J0521-2776	M4	GABLE	1	1		
					Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

> -0-10-8 7-0-0 7-0-0 0-10-8

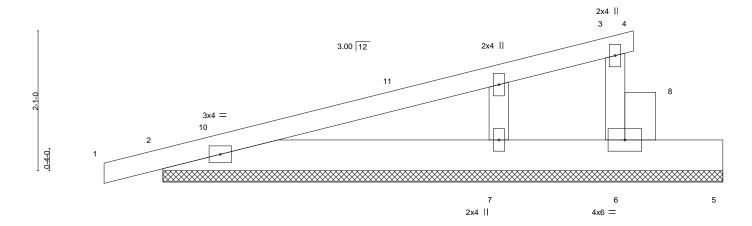
8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:58 2021 Page 1 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-9v\_bl0NmgUufqZLuvhfqAh8KXsrRstkqjlUMU3zAKa3

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals

Scale = 1:17.1



8-4-0 DEFL. GRIP LOADING (psf) SPACING-2-0-0 CSI. (loc) I/defI L/d **PLATES** 

**BRACING-**

TOP CHORD

BOT CHORD

**TCLL** 20.0 Plate Grip DOL 1.15 TC 0.66 Vert(LL) -0.01 n/r 120 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.06 Vert(CT) 0.01 n/r 120 WB 0.00 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 6 n/a n/a Code IRC2015/TPI2014 Weight: 37 lb BCDL 10.0 Matrix-P FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1 2x6 SP No.1 BOT CHORD

2x4 SP No.2 \*Except\* WFBS 6-8: 2x6 SP No.1 **OTHERS** 2x4 SP No.2

REACTIONS.

(size) 6=8-4-0, 2=8-4-0, 7=8-4-0 Max Horz 2=96(LC 8)

Max Uplift 6=-109(LC 12), 2=-133(LC 8)

Max Grav 6=235(LC 1), 2=303(LC 1), 7=181(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 7-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=109, 2=133.



June 2,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



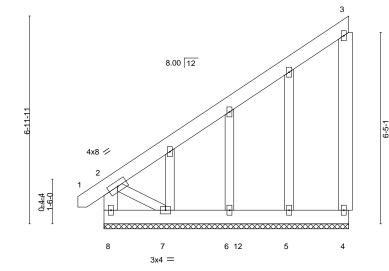
Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5B Williams Farm/Harnett
					E15795802
J0521-2776	M5	GABLE	1	1	Joh Deference (entional)

Comtech, Inc, Fayetteville, NC - 28314,

Job Reference (optional) 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:48:59 2021 Page 1 ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-d5YzyMOORo0WSiw4SOA3juhZOGCKbK?zxPDv0VzAKa2

0-10-8 8-4-0

Scale = 1:38.6



LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.40	Vert(LL) -(	0.02 1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT)	0.01 1	n/r	120		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.06	Horz(CT) -	0.00 4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 79 lb	FT = 20%

LUMBER-**BRACING-**

TOP CHORD 2x6 SP No.1 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

2x6 SP No.1 BOT CHORD except end verticals.

2x6 SP No.1 \*Except\* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WFBS 2-7: 2x4 SP No.2

2x4 SP No.2 REACTIONS. All bearings 8-2-8.

(lb) -Max Horz 8=271(LC 12) Max Uplift All uplift 100 lb or less at joint(s) except 4=-206(LC 12), 7=-142(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 5, 6, 7 except 4=311(LC 19), 8=311(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 3-4=-301/227, 2-8=-298/0

**BOT CHORD** 7-8=-302/225 **WEBS** 2-7=-265/356

### NOTES-

**OTHERS** 

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 206 lb uplift at joint 4 and 142 lb uplift at joint 7.



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5B Williams Farm/Harnett
J0521-2776	NAC .	MONODITOLI			E15795803
JU521-2776	M6	MONOPITCH	р	1	Joh Potorongo (antignal)

Comtech, Inc, Fayetteville, NC - 28314, Job Reference (optional)
8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:00 2021 Page 1

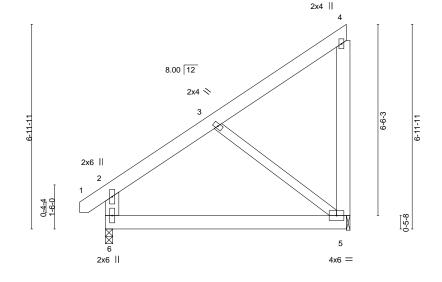
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



Scale = 1:39.3



LOADING	G (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> ir	(loc)	I/defI	L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.09	Vert(LL) -0.03	5-6	>999	360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) -0.06	5-6	>999	240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.16	Horz(CT) -0.00	5	n/a	n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.07	5-6	>999	240	Weight: 69 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No.1 2x6 SP No.1 BOT CHORD

2x6 SP No.1 \*Except\* **WEBS** 

3-5: 2x4 SP No.2

REACTIONS. (size) 6=0-3-0, 5=0-1-8

Max Horz 6=178(LC 12)

Max Uplift 6=-27(LC 9), 5=-143(LC 9) Max Grav 6=376(LC 1), 5=310(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

2-3=-268/39, 2-6=-290/86 TOP CHORD

**BOT CHORD** 5-6=-250/259 WFBS 3-5=-313/285

### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-7-11, Interior(1) 3-7-11 to 8-1-0 zone; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 6 and 143 lb uplift at joint 5.



June 2,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5B Williams Farm/Harnett		
						E15795804	1
J0521-2776	P1	GABLE	1	1			ı
					Job Reference (optional)		ı
Comtech, Inc, Fay	yetteville, NC - 28314,			8.330 s Od	ct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:01 2	2021 Page 1	
			ID:BoL?hgXg	YpqwdOiyUm	ncQyz41fz-ZUfjN1QfyPGEh04TapCXoJmv73om3DPGF	ji05NzAKa0	
-0-10-8		6-5-0			12-10-0	13-8-8	
0-10-8		6-5-0			6-5-0	0-10-8	

Scale = 1:23.4

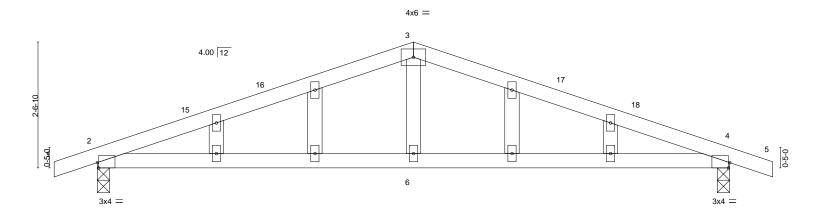


Plate Offsets (X,Y)	[2:0-0-5,Edge], [4:0-0-5,Edge]		0-0-0	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.44	Vert(LL) 0.11 4-6 >999 240	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(CT) -0.09 2-6 >999 240	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.07	Horz(CT) 0.01 4 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 51 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No.1

2x4 SP No.2 WFBS **OTHERS** 2x4 SP No.2

REACTIONS. (size) 2=0-3-0, 4=0-3-0

Max Horz 2=-49(LC 17) Max Uplift 2=-309(LC 8), 4=-309(LC 9)

Max Grav 2=563(LC 1), 4=563(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-910/965, 3-4=-910/965 **BOT CHORD** 2-6=-828/799. 4-6=-828/799

WEBS 3-6=-383/303

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-5-0, Exterior(2) 6-5-0 to 10-9-13, Interior(1) 10-9-13 to 13-8-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 309 lb uplift at joint 2 and 309 lb uplift at ioint 4.



12-10-0

Structural wood sheathing directly applied or 5-9-9 oc purlins.

Rigid ceiling directly applied or 6-6-10 oc bracing.





Job	Truss	Truss Type	Qty	Ply	Weaver/Lot 5B Williams Farm/Harnett		
						E15795805	
J0521-2776	P2	COMMON	2	1			
					Job Reference (optional)		
Comtech, Inc, Fayettev	/ille, NC - 28314,		8	3.330 s Oct	7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:03 202	21 Page 1	
•			ID:BoL?hgXgIYp	qwdOiyUm	cQyz41fz-VsnUojRvU0WyxKErhEF?tksFdtUEX7vZs0B7	9GzAKa_	
-0-10-8	6-5	5-0			12-10-0	13-8-8	
0-10-8	6-5	5-0			6-5-0	0-10-8	

Scale = 1:23.4

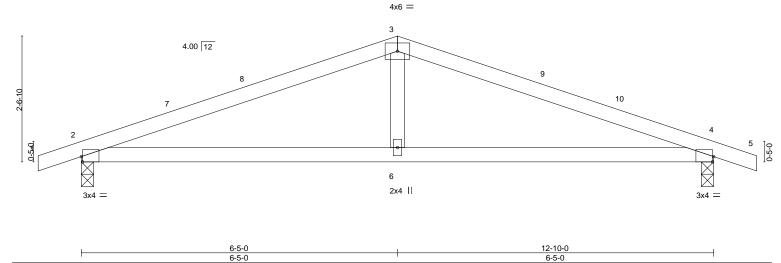


Plate Of	fsets (X,Y)	[2:0-0-5,Edge], [4:0-0-5,Edge]								
LOADIN	G (psf)	SPACING- 2-0-	CSI.	DEFL.	in (	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.1	TC 0.4	44 Vert(LL)	0.11	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL 1.1	BC 0.3	34 Vert(CT)	-0.09	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.0	O7 Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S						Weight: 45 lb	FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **WEBS** 

REACTIONS. (size) 2=0-3-0, 4=0-3-0 Max Horz 2=-29(LC 13)

Max Uplift 2=-217(LC 8), 4=-217(LC 9) Max Grav 2=563(LC 1), 4=563(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-910/965 3-4=-910/965 **BOT CHORD** 2-6=-828/799, 4-6=-828/799

WFBS 3-6=-383/303

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-5-0, Exterior(2) 6-5-0 to 10-9-13, Interior(1) 10-9-13 to 13-8-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 217 lb uplift at joint 2 and 217 lb uplift at joint 4.



Structural wood sheathing directly applied or 5-9-9 oc purlins.

Rigid ceiling directly applied or 6-6-10 oc bracing.

JOD	Truss	Truss Type	Qty	Piy	Weaver/Lot 5B Williams Farm/Harnett	
					E15795806	
J0521-2776	P3	COMMON	3	1		
					Job Reference (optional)	
Comtech, Inc, Fayette	ville, NC - 28314,			3.330 s Oc	t 7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:04 2021 Page 1	_
-		ID:B	oL?hgXgIYpc	wdOiyUmo	cQyz41fz-z2Ls?3SXFKepYUp2FxmEQyOPpHqQGa9i5gxghizAKZz	
-0-10-8	1	6-5-0		-	12-10-0	
0.40.0		6 E O			6.5.0	

Scale = 1:22.5

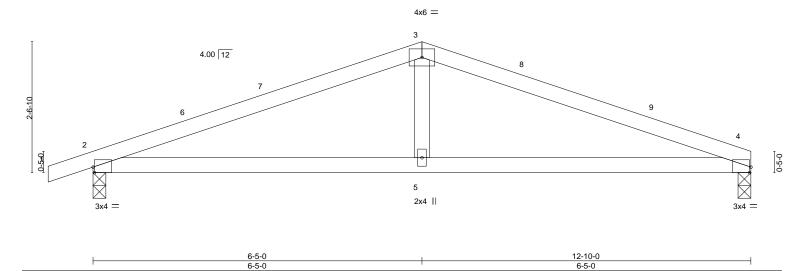


Plate Off	sets (X,Y)	[2:0-0-5,Edge], [4:0-0-5,I	Edge]									
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	0.11	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.09	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/T	PI2014	Matri	x-S						Weight: 44 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No.1 **WEBS** 2x4 SP No.2

REACTIONS. (size) 4=0-3-0, 2=0-3-0

Max Horz 2=32(LC 12)

Max Uplift 4=-179(LC 9), 2=-217(LC 8) Max Grav 4=501(LC 1), 2=566(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-918/984, 3-4=-916/993 **BOT CHORD** 2-5=-866/807, 4-5=-866/807

WFBS 3-5=-386/305

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-5-0, Exterior(2) 6-5-0 to 10-9-13, Interior(1) 10-9-13 to 12-8-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 4 and 217 lb uplift at joint 2.



Structural wood sheathing directly applied or 5-7-10 oc purlins.

Rigid ceiling directly applied or 6-4-14 oc bracing.





Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795807 J0521-2776 VB-1 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:05 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-SFvEDPT90emgAeOEpfHTy9xeJhDY?1OrKKgED9zAKZy 5-0-4 5-0-4 10-0-8 5-0-4 Scale = 1:31.6 4x4 = 2 12.00 12 3 2x4 // 2x4 \ 4 2x4 || 10-0-8 10-0-8 GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES TCLL** 20.0 Plate Grip DOL 1.15 TC 0.24 Vert(LL) n/a n/a 999 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.16 Vert(CT) n/a n/a 999 WB 0.07 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 3 n/a n/a

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

BCDL

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **OTHERS** 

10.0

REACTIONS.

(size) 1=10-0-8, 3=10-0-8, 4=10-0-8

Max Horz 1=-112(LC 8)

Max Uplift 1=-28(LC 13), 3=-28(LC 13)

Max Grav 1=212(LC 1), 3=212(LC 1), 4=324(LC 1)

Code IRC2015/TPI2014

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 1 and 28 lb uplift at ioint 3.



Weight: 41 lb

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

FT = 20%



Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795808 J0521-2776 VB-2 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:06 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-wRTcQITnnxuXonzQNMoiVNTpE4alkVB?Y\_QnlbzAKZx 4-0-4 4-0-4 4-0-4 Scale = 1:26.8 4x4 = 12.00 12 9-0-0 9-0-0 2x4 // 2x4 || 2x4 🚿 8-0-8 8-0-8

LOADING (psf)	SPACING- 2-0-0	CSI.	<b>DEFL.</b> ir	(loc)	I/defI	L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) n/a	-	n/a	999	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) n/a	-	n/a	999	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 32 lb FT = 20%
BCDL 10.0	Code IRC2015/1PI2014	Matrix-P					Weight: 32 lb FT = 20%

**BRACING-**TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **OTHERS** 

(size) 1=8-0-8, 3=8-0-8, 4=8-0-8

Max Horz 1=-88(LC 8)

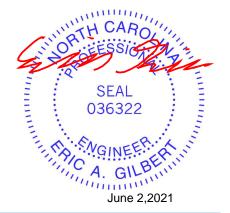
Max Uplift 1=-32(LC 13), 3=-32(LC 13)

Max Grav 1=179(LC 1), 3=179(LC 1), 4=230(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 1 and 32 lb uplift at ioint 3.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

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ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795809 J0521-2776 VB-3 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:06 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-wRTcQlTnnxuXonzQNMoiVNTr\_4bUkVT?Y\_QnlbzAKZx 3-0-4 3-0-4 Scale = 1:20.6 4x4 = 2 12.00 12 3 9-0-0 9-0-0 2x4 // 2x4 📏 2x4 || 6-0-8 GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES TCLL** 20.0 Plate Grip DOL 1.15 TC 0.12 Vert(LL) n/a n/a 999 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.05 Vert(CT) n/a n/a 999 WB 0.02 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-P Weight: 24 lb FT = 20% **BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **OTHERS** 

REACTIONS. (size) 1=6-0-8, 3=6-0-8, 4=6-0-8

Max Horz 1=64(LC 9)

Max Uplift 1=-23(LC 13), 3=-23(LC 13)

Max Grav 1=130(LC 1), 3=130(LC 1), 4=167(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 1 and 23 lb uplift at ioint 3.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795810 J0521-2776 VB-4 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:07 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-Od1?e5UPYF0OPxXdw4Jx1a01uUxDTyr8ne9KH1zAKZw 2-0-4 2-0-4 4x4 = Scale = 1:12.9 12.00 12 3 9-0-0 9-0-0 2x4 // 2x4 || 2x4 📏 4-0-8 4-0-8 SPACING-GRIP LOADING (psf) 2-0-0 CSI. DEFL in (loc) I/defI L/d **PLATES TCLL** 20.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) n/a n/a 999 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.02 Vert(CT) n/a n/a 999

Horz(CT)

**BRACING-**

TOP CHORD

BOT CHORD

0.00

3

n/a

n/a

Rigid ceiling directly applied or 10-0-0 oc bracing.

Structural wood sheathing directly applied or 4-0-8 oc purlins.

Weight: 15 lb

FT = 20%

LUMBER-

**BCLL** 

BCDL

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **OTHERS** 

0.0

10.0

REACTIONS.

(size) 1=4-0-8, 3=4-0-8, 4=4-0-8

Rep Stress Incr

Code IRC2015/TPI2014

Max Horz 1=-40(LC 8)

Max Uplift 1=-14(LC 13), 3=-14(LC 13) Max Grav 1=81(LC 1), 3=81(LC 1), 4=104(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-P

0.01

- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

YES

- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 14 lb uplift at ioint 3.





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795811 J0521-2776 VB-5 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:08 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-sqaNrRV2JZ8F156pUnqAaoZCBuGZCPCI0IvuqTzAKZv 1-0-4 2-0-8 1-0-4 Scale = 1:7.9 3x4 12.00 12 3 9-0-0 9-0-0 2x4 // 2x4 📏 2-0-8 2-0-8 Plate Offsets (X Y)-- [2:0-2-0 Edge]

T late on	3013 (71, 1)	[2.0 2 0,Eugo]		
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.01	Vert(LL) n/a - n/a 999 MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.01	Vert(CT) n/a - n/a 999
BCLL	0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3 n/a n/a
BCDL	10.0	Code IRC2015/TPI2014	Matrix-P	Weight: 6 lb $FT = 20\%$

LUMBER-

TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No.1 **BRACING-**TOP CHORD

**BOT CHORD** 

Structural wood sheathing directly applied or 2-0-8 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-0-8, 3=2-0-8

Max Horz 1=-16(LC 8)

Max Uplift 1=-2(LC 12), 3=-2(LC 12) Max Grav 1=54(LC 1), 3=54(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 1 and 2 lb uplift at joint 3.





Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795812 J0521-2776 VC-1 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:09 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-K08l3nWg4sG5fFh?2ULP6?5KMlaRxsrREyeRMwzAKZu 5-5-0 5-5-0 10-10-1 5-5-1 Scale = 1:19.2 4x4 = 2 6.00 12 8 3 2x4 / 2x4 > 2x4 || 10-10-1 10-10-1 LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.24 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.17 Vert(CT) n/a n/a 999 YES WB 0.04 **BCLL** 0.0 Rep Stress Incr Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-S Weight: 35 lb FT = 20% BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **OTHERS** 

REACTIONS. (size) 1=10-10-1, 3=10-10-1, 4=10-10-1

Max Horz 1=31(LC 9) Max Uplift 1=-23(LC 12), 3=-29(LC 13)

Max Grav 1=176(LC 23), 3=176(LC 24), 4=413(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**WEBS** 2-4=-273/182

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 5-5-0, Exterior(2) 5-5-0 to 9-9-13, Interior(1) 9-9-13 to 10-2-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 1 and 29 lb uplift at joint 3.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



E15795813 J0521-2776 VC-2 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:10 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-oCi7G6XIrAOyGPGCcCtefDeWEiyNgJObTcO?uMzAKZt 6-10-1 3-5-1 Scale = 1:13.5 4x4 = 2 6.00 12 3 9-0-0 2x4 || 2x4 / 2x4 > 6-10-1 6-10-1 GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES TCLL** 20.0 Plate Grip DOL 1.15 TC 0.10 Vert(LL) n/a n/a 999 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.06 Vert(CT) n/a n/a 999 WB 0.02 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 BCDL 10.0 Matrix-P Weight: 21 lb FT = 20% LUMBER-**BRACING-**TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

BOT CHORD

Qty

Ply

Weaver/Lot 5B Williams Farm/Harnett

Rigid ceiling directly applied or 10-0-0 oc bracing.

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **OTHERS** 

REACTIONS. (size) 1=6-10-1, 3=6-10-1, 4=6-10-1

Max Horz 1=-18(LC 10)

Truss

Truss Type

Max Uplift 1=-18(LC 12), 3=-21(LC 13)

Max Grav 1=113(LC 1), 3=113(LC 1), 4=217(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

Job

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 1 and 21 lb uplift at ioint 3.





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Weaver/Lot 5B Williams Farm/Harnett E15795814 J0521-2776 VC-3 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jun 2 11:49:10 2021 Page 1 Comtech, Inc. ID:BoL?hgXgIYpqwdOiyUmcQyz41fz-oCi7G6XIrAOyGPGCcCtefDeXciywgJibTcO?uMzÄKZt 1-5-0 1-5-0 2-10-1 1-5-1 Scale = 1:6.2 3x4 6.00 12 3

> 2x4 > 2x4 / 2-10-1 2-10-1

Plate Offsets (X,Y) [2:0-2-0,Edge]												
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0 Code IRC2015/TPI2014		Matri	x-P	, ,					Weight: 7 lb	FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No 1 BOT CHORD 2x4 SP No.1 **BRACING-**

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 2-10-1 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-10-1, 3=2-10-1

Max Horz 1=-5(LC 8)

Max Uplift 1=-4(LC 12), 3=-4(LC 13) Max Grav 1=64(LC 1), 3=64(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1 and 4 lb uplift at joint
- 6) Non Standard bearing condition. Review required.

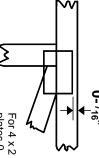


## Symbols

# PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0-  $\frac{1}{16}$  from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

\* Plate location details available in MiTek 20/20 software or upon request.

### PLATE SIZE

4 × 4

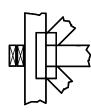
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

# LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

### **BEARING**



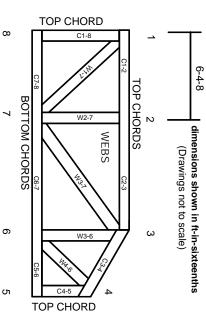
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

## Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing. Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-89:

# Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# **General Safety Notes**

## Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

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- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

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- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.